



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,593	03/10/2005	Kaoru Inoue	232444	2622
23460	7590	10/18/2006	EXAMINER	
LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6780			RAZA, SAIRA B	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,593

Applicant(s)

INOUE ET AL.

Examiner

Saira Raza

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al. (US 5,153,038) in view of Rooney (US 5,958,254).

4. Koyama discloses plastic containers comprising a barrier layer containing an oxygen scavenger and two outer layers of thermoplastic resin (abstract; col. 2 lines 55-68). The gas barrier resin is preferably ethylene-vinyl alcohol (EVOH) and contains 1-1000%, preferably 5-200% by weight of the oxygen scavenger (col. 7 lines 17-46). The outer layers preferably contain polyolefins (col. 8 line 63-col. 9 line 12). However, the reference does not disclose the applicant's claimed anthraquinone component. Rooney teaches multilayer films, wherein it is preferable that an outer layer is an oxygen barrier film, so that the film may be used in a manner such that only the layer(s) containing the reducible organic compound is exposed to molecular oxygen from the atmosphere or

Art Unit: 1711

liquid for which a reduction in molecular oxygen concentration is required (col. 5, lines 35-45). Suitable reducible organic compounds include preferably, 9,10-anthraquinone, specifically in the case of 9,10-anthraquinone substitution occurs preferably at the 2, 3, 6 or 7 positions (col. 2, lines 60-61; col. 4, lines 14-19). This component is noted by the applicant as having the claimed percent weight loss, placement of substitution, and solubility. Thus, it would have been *prima facie* obvious to use the anthraquinone to provide indicative oxygen sensitive dyes for the Koyama packaging.

5. Claims 5-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyama et al. (US 5,153,038) in view of Rooney (US 5,958,254) as applied to the claims above, and further in view of Nippon Synthetic.

6. The references apply as above, failing to teach the inclusion of an acid component and failing to specify the water content of the EVOH. Koyama does teach the method of melt mixing the components and extruding them (col. 9 lines 55-68). Nippon Synthetic teaches extruded EVOH materials comprising an EVOH polymer and small amounts of acid components, where the water content reaches up to 50% (abstract). The materials have improved transparency, gas barrier properties, and film appearance in a continuous process. Thus, it would have been *prima facie* obvious to include any amount of acid and to choose any water content sufficient to optimize transparency, gas barrier properties, and appearance in the continuous process taught by the combination of Koyama and Rooney above.

7. In response to applicants arguments, that motivation does not exist to combine the teachings of Nippon Synthetic with Koyama and Rooney, it is noted that Nippon Synthetic provides significant motivation for one of ordinary skill in the art to have considered it logical to anticipated with a high degree of probability that a trial of the combination would have been successful.

Art Unit: 1711

Wherein, only a reasonable expectation of success, not absolute predictability is necessary for obviousness. *In re Longi*, 759F.2d 887, 897, 225 USPQ 645, 651-52 (Fed. Cir. 1985).

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Raza whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700